

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A probe for use in measuring apparatus comprising:
 - a housing;
 - a member movable with respect to the housing onto which a stylus may be mounted such that movement of the stylus results in movement of the member;
 - a first transducer system for measuring movement of the member relative to the housing;
 - a second transducer system which measures one of a property of the probe or a relationship between the probe and an adjacent surface;
 - wherein the member may be located in a defined rest position with respect to the housing;
 - and wherein when the member is located in this defined rest position, the first transducer system is locked but the second transducer system is not locked.
2. (Original) A probe according to claim 1 in which the member and the housing or a body connected to the housing are each provided with complementary location elements whereby the member or body may be biased or driven to a position where the member is held in a defined rest position with respect to the housing, said defined rest position being defined by the location elements.
3. (Original) A probe according to claim 2 wherein one of the member or the body may be biased or driven along a single axis to a position where the member is held in the defined rest position with respect to the housing about at least two axes.
4. (Currently Amended) A probe according to ~~any of claims 1-3~~ claim 1 wherein the second transducer system produces a touch trigger signal.
5. (Currently Amended) A probe according to ~~any of claims 1-3~~ claim 1 wherein the second transducer system measures the range of movement of the member relative to the housing.

6. (Currently Amended) A probe according to ~~any of claims 1-3~~ claim 1 wherein the second transducer system is a non-contact transducer.

7. (Currently Amended) A probe according to ~~any of claims 1-6~~ claim 1 wherein when the member is located in its defined rest position, its movement is constrained in three dimensions.

8. (Currently Amended) A probe according to ~~any of claims 1-7~~ claim 1 wherein the defined rest position is a kinematically defined rest position.

9. (Original) An analogue probe for use in measuring apparatus comprising:

a housing;

a member movable with respect to the housing onto which a stylus may be mounted such that movement of the stylus results in movement of the member; wherein the member and the housing or a body connected to the housing are each provided with complementary location elements;

whereby one of the member and body may be biased or driven along one axis to a position where the member is held in a defined rest position with respect to the housing about at least two axes, said rest position being defined by the location elements.

10. (Original) An analogue probe according to claim 9 wherein a biasing means or driving means is used to bias or drive the member or the body to a position where the member is held in the defined rest position, and whereby during movement of the member or the body, the biasing or driving means allows movement of the member relative to the housing in a direction perpendicular to said axis.

11. (Currently Amended) An analogue probe according to ~~any of claims 9 or 10~~ claim 9 wherein biasing means are provided to bias the member into the defined rest position and wherein the member is biased into the defined rest position when there is no stylus mounted on the member.

12 (Original) An analogue probe according to claim 11 wherein when a stylus is mounted on the member, the weight of the stylus holds the member away from the defined rest position.

13. (Currently Amended) An analogue probe according to ~~any of claims 9 or 10~~ claim 9 wherein driving means are provided to drive the member or body to a position where the member is held in the precisely defined rest position.

14. (Currently Amended) An analogue probe according to ~~any of claims 9-13~~ claim 9 wherein the defined rest position acts as a datum position.

15. (Currently Amended) An analogue probe according to ~~any of claims 9-14~~ claim 9 wherein the analogue probe is provided with transducer system to measure the position of the member relative to the housing; wherein the transducer system outputs are input into a digitising circuit; and wherein when the member is located in the defined rest position, counters in the digitising circuit are set to zero.

16. (Currently Amended) An analogue probe according to ~~any of claims 9-15~~ claim 9 wherein the probe includes a first transducer system which measures the movement of the member relative to the housing and a second transducer system which measures a property of the probe or the relationship between the probe and a surface adjacent the probe, whereby when the member is in the defined rest position the first transducer system is locked and the second transducer system is not locked.

17. (Currently Amended) A method of datuming an analogue probe for use in measuring apparatus, the analogue probe comprising a housing, a member movable with respect to the housing onto which a stylus may be mounted such that movement of the stylus results in movement of the member, and a transducer system for measuring the position of the member relative to the housing, wherein the member and the housing or a body connected to the housing are each provided with complementary location elements, comprising the steps of:

 biasing or driving one of the member and the body to a position where the member is held in a defined rest position with respect to the housing;

 outputting the transducer system readings to a digitising circuit and setting a digital counter of the digitising circuit to zero.